

REMARKS

Claims 1-16 are pending in the application.

Claims 1-16 are rejected.

Claims 1, 7 and 8 have been amended.

I. Double Patenting

A signed terminal disclaimer is submitted herein to overcome the nonstatutory obviousness-type double patenting rejection.

II. Amendment to the Specification

The Field of the Invention has been revised. It is believed that this revision does not create new matter. In this regard, it is noted that certain of the originally filed claims, e.g., claims 8 and 16, did not include the limitation that the through-going orifices “extend substantially perpendicular manner with respect to an outer surface of the part”. Such claims constitute part of the original disclosure.

The term “brew” which appears on page 1, line 30, page 4, line 19 and page 8, line 12, is clearly an erroneous translation of the German term “Braue” and that the proper technical English word for that German term is “flash.” Moreover, page 1, lines 25-33 recite:

[t]he requirements in micro-injection molding processes for the piercing punches to fit accurately into the tools, in particular on the microstructured tool halves, are much higher than in conventional injection molding processes, the reason being, that in order to form microstructures of identical shapes, the material melt must have an extremely low viscosity, but this increases the risk that the material melt penetrates between the piercing punch and the tool into where they fit together, where it forms a brew. This brew can lead to the connection between the through-going orifice and the microchannel becoming partially or completely blocked, thus rendering the microchannel and the entire part unusable.

The above description clearly defines a “brew” as a material melt which because of its low viscosity penetrates a gap between the piercing punch and the tool where they fit together. In the technical field of the invention, a material melt that blocks a microchannel is called ‘flash.’

Moreover, no possible meaning of the English term “brew” is any way related to the portion of the specification quoted above. The appearance of the term “brew” in the description is thus clearly due to a translation error.

The specification and claims are also being revised to reflect that the part produced is not the mold half but a component that is installed in a mold half. Specific reference is made to Fig. 5 and the disclosure on page 7, lines 20 to 34, and in particular from the statements on page 7, line 22 - “the microstructured nickel tool insert 17” - and on page 7, lines 29 - “the nickel shim 17 with the integrated piercing punches 18 is installed in a tool half 22”. In this amendment, other portions of the specification and claims 7 and 8 are being amended to bring them into conformity with the above-quoted section and drawing figure.

III. Amendment to the Claims

The term “pin” appears to convey more accurately the technical meaning than the term “piercing punch” used in the claims. The specification on page 1, line 18 supports this equivalency. Accordingly, “piercing punch” are replaced with “pin” in claims 1 and 7. In addition, “in each case as” of claim 7 is replaced with “when.”

Claims 7 and 8 are being amended to reflect that the tool insert is part of a tool half or is a component of a mold. These changes, as with the requested change to the Specification are believed supported by Figure 5, and the disclosure on page 7, lines 20 to 34.

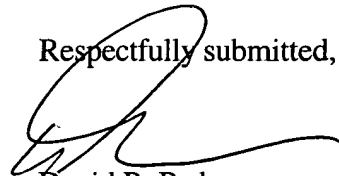
It is respectfully submitted that the above amendments in specification and claims do not add new matter.

Correspondence and Fees

No fees are believed to be necessitated by the instant response. However, should this be in error, authorization is hereby given to charge Deposit Account no. 03-3839 for any underpayment, or to credit any overpayments.

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Respectfully submitted,



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